

Critical Notes on the Genus *Dontostemon* (Brassicaceae)

Dmitry A. German

South-Siberian Botanical Garden, Altai State University, 656049, Lenina St. 61, Barnaul,
Russia. oreoloma@rambler.ru

ABSTRACT. Notes on the taxonomy and geography of the genus *Dontostemon* Andrzejowski ex C. A. Meyer (Brassicaceae) are given. *Torularia sergierskiana* Polozhij is reduced to synonymy of *D. pinnatifidus* (Willdenow) Al-Shehbaz & H. Ohba, and *D. glandulosus* (Karelin & Kirilov) O. E. Schulz is excluded from the flora of Russia. A new subspecies, *D. senilis* Maximowicz subsp. *gubanorii* D. German (northwestern Mongolia), is described. *Dontostemon intermedius* Voroschilov is recognized as an independent species instead of a synonym of *D. dentatus* (Bunge) Ledebour.

Key words: Brassicaceae, *Dimorphostemon*, *Dontostemon*, Far East, Mongolia, Russia, *Torularia*.

The central and eastern Asian genus *Dontostemon* Andrzejowski ex C. A. Meyer (Brassicaceae), which currently includes *Dimorphostemon* Kitagawa and *Alaida* Dvořák, has been the focus of several taxonomic studies (Golubkova, 1950, 1974a, b, 1976; Dvořák, 1971; Al-Shehbaz, 2000; Al-Shehbaz & Ohba, 2000). These authors have differed in their delimitation of the genus (for further information, see Al-Shehbaz & Ohba, 2000). According to Zhou et al. (2001), *Dontostemon* includes 11 species and one subspecies. A critical study of the Siberian, Far Eastern, and Mongolian material of *Dontostemon* yields additional information on synonymy, distribution, and the nomenclatural novelties discussed herein.

STATUS OF *DIMORPHOSTEMON SERGIEVSKIANUS*

***Dontostemon pinnatifidus* (Willdenow) Al-Shehbaz & H. Ohba, Novon 10: 96. 2000. Basionym: *Cheiranthus pinnatifidus* Willdenow, Sp. Pl. 3(1): 523. 1800. TYPE: Siberia, Stephan s.n. (holotype, B-W 12111).**

Torularia sergierskiana Polozhij, Novosti Sist. Vyssh. Rast. 11: 210. 1974. Syn. nov. *Dichasianthus sergierskianus* (Polozhij) Soják, Sborn. Nár. Muz. Praze, 1982(1–2): 107. 1982. *Dimorphostemon sergierskianus* (Polozhij) Ovczinnikova, Fl. Sib. 7: 100. 1994. *Neotorularia sergierskiana* (Polozhij) Czerepanov, Vasc. Pl. Russia & Adj. States (former USSR): 145. 1995. TYPE: Russia, Tuva: [eastern] Tannu-Ola Range, vic. of the Shurmak,

Soya valley, 10 June 1971, Y. Surov, S. Vydrina & V. Kurbatsky s.n. (holotype, TK; isotype, LE).

The species was originally described as *Torularia sergierskiana* Polozhij from southern Siberia (Tuva, eastern Tannu-Ola range) and compared to the central Asian *T. glandulosa* (Karelin & Kirilov) Vassilezenko (Polozhij, 1974). However, the generic placement of the latter species was shown to be artificial (Dvořák, 1971), and Golubkova (1974a) transferred it to *Dimorphostemon*. In her revision of *Dimorphostemon*, Golubkova (1976) did not deal with *T. sergierskiana*. The species was later recognized as *Dichasianthus sergierskianus* (Polozhij) Soják (Soják, 1982). *Dimorphostemon sergierskianus* (Polozhij) Ovczinnikova (Rybinskaya, 1994), and *Neotorularia sergierskiana* (Polozhij) Czererpanov (Czerepanov, 1995). Both Golubkova (1950) and Al-Shehbaz and Ohba (2000) disagreed with Kitagawa (1939) and reduced *Dimorphostemon* to synonymy with *Dontostemon*. This position is well supported by recent molecular studies on *Dontostemon* (Bleeker et al., unpublished).

Dimorphostemon sergierskianus was treated as a synonym of *Dontostemon glandulosus* (Karelin & Kirilov) O. E. Schulz (Zhou et al., 2001), and such placement implied that the latter species occurs in and is reported for the first time from Russia. However, these authors did not examine the holotype of the former species, and they may have overlooked the slight differences in flower shape and size between the two species. A critical study of the type collection of *Dimorphostemon sergierskianus* shows that it is indistinguishable in flower shape and size (obovate, 5.5–6.5 × 4.5–5 mm) and in the presence of distinct filament teeth from *Dontostemon pinnatifidus* (petals obovate, (5–)6–8 × (2.5–)3–4(–5) mm), a species widely distributed in central and eastern Asia (Zhou et al., 2001) and very common in Siberia and the Russian Far East (Berkutenko, 1988; Rybinskaya, 1994). By contrast, *Dontostemon glandulosus* has no filament teeth, has spathulate petals measuring 2–4(–4.5) × (0.5–)1–1.5(–2) mm, and has a geographical distribution in the west of central Asia and adjacent Tajikistan and Kazakhstan (Zhou et al., 2001). Therefore, *Dimorphostemon sergierskianus* should be treated as a synonym of *Dontostemon*.